formulae (I) to (VI), from 5 to 25% by weight of hydroxypropyl methyl cellulose.[2] Claims 11 and 20 have been revised correspondingly. Claim 4 has been amended to include the requirements of Claim 5, and Claims 15 and 16 have been amended to depend upon Claims 14 and 4, respectively, for proper antecedent basis. No new matter has been added.

The Examiner rejected Claims 1, 2, 4 and 6 to 25 under 35 U.S.C. §103(a) as being unpatentable in light of the teaching of ***Andries et al.*** (US 6,197,779) when considered in view of the disclosures of ***Goertz et al.*** (US 4,801,460), of ***Nakamichi et al.*** (US 5,456,923), of ***Sasatani et al.*** (US 5,876,760), and of ***Takada*** (US 5,350,741). In particular, the Examiner pointed out

- that ***Andries et al.*** taught HIV inhibiting pyrimidine derivatives as encompassed by applicants' formula (I) and that the respective compounds could be formulated into a variety of conventional dosage forms;
- that ***Goertz et al.*** taught solid pharmaceutical dosage forms comprising homo- or copolymers of N-vinylpyrrolidone as a carrier, and in which the pharmaceutical agent was present in form of a solid solution;
- that ***Nakamichi et al.*** taught hydroxypropyl methyl cellulose as being equally useful as a solid carrier as homo- or copolymers of N-vinylpyrrolidone; and
- that both ***Sasatani et al.*** and ***Takada*** taught that polyethylene glycol castor oil ester and citric acid were known excipients.

The Examiner argued that it would have been prima facie obvious for a person of ordinary skill in the art, based on the information conveyed by the references, to formulate the compounds of ***Andries et al.*** in the manner required in accordance with applicants' claims. Favorable reconsideration of the Examiner's position and withdrawal of the respective rejection is respectfully solicited in light of the following remarks.

As explained by the Court in <u>*In re Antonie*</u> the "*invention as a whole*" which is referenced in 35 U.S.C. 103(a) encompasses not only the elements or features which are specifically recited in the claims but also the properties which are inherent in the recited elements:[3]

> *In determining whether the invention as a whole would have been obvious under 35 U.S.C. 103, we must first delineate the invention as a whole. In delineating the invention as a whole, we look not only to the subject matter which is literally recited in the claim in question... but also to those properties of the subject matter which are inherent in the subject matter <u>and</u> are disclosed in the specification... Just as we look to a chemical and its properties when we examine the obviousness of a composition of matter claim, it is this invention <u>as a whole</u>, and not some part of it, which must be obvious under 35 U.S.C. 103.*

2) Cf. page 12, indicated lines 43 to 45, of the application.

3) *In re Antonie*, 559 F.2d 618, 620, 195 USPQ 6, 8 (CCPA 1977); emphasis original.

Applicants' data as set forth in Tables 1 and 2 of the application[4] illustrate that the particular combination of constituents which is required in accordance with applicants' claims conveys to the particles specific sustained release properties. Applicants are currently preparing a Declaration setting forth data which further illustrate the sustained release properties of the particles referenced in the claims presented herewith. These special release properties could not reasonably be expected in light of the prior art:

As pointed out by the Examiner, ***Nakamichi et al.*** teaches that hydroxypropyl methyl cellulose is a solid carrier which is equivalent to homo- or copolymers of N-vinylpyrrolidone. The disclosure of ***Nakamichi et al.*** therefore fails to suggest or imply that the incorporation of certain amounts of hydroxypropyl methyl cellulose into a polymer matrix consisting of homo- or copolymers of N-vinylpyrrolidone which comprises an active ingredient in accordance with applicants' formulae (I) to (VI) as a solid dispersion would convey to the respective dosage form release properties which distinctly differ from the release properties of a dosage form which lacks the hydroxypropyl methyl cellulose constituent. The respective properties of the particular combination of constituents is also neither taught nor suggested by any one of the other references relied upon by the Examiner.

Andries et al. merely generally address dosage forms without, however, providing information concerning means which can be employed to control the release properties of such dosage forms. According to the disclosure of ***Goertz et al.***, a control of the release properties of the dosage forms based upon N-vinylpyrrolidone polymers is achieved either by varying the type and the amount of the comonomer(s) incorporated into the N-vinylpyrrolidone polymer,[5] or by providing the dosage form with a coating.[6] ***Sasatani et al.*** mention hydroxypropyl methyl cellulose among representatives of water soluble polymers,[7] and the disclosure of ***Takada*** neither mentions hydroxypropyl methyl cellulose nor means to achieve sustained release properties in a dosage form.

In light of the referenced art, and in particular the disclosures of ***Goertz et al.*** and of ***Nakamichi et al.***, a person of ordinary skill in the art would therefore not reasonably expect that the incorporation of certain amounts of hydroxypropyl methyl cellulose into a polymer matrix consisting of a homo- or copolymer of N-vinylpyrrolidone comprising an active ingredient in accordance with applicants' formulae (I) to (VI) as a solid dispersion would provide for a sustained release of the respective active ingredient. As such, the referenced art clearly fails to render the invention which is defined in applicants' Claims 1, 2, 4, 6 to 8, 10 to 16 and 20 to 25 *as a whole* prima facie obvious as is required for a finding that a claimed invention is unpatentable under Section 103(a). It is therefore respectfully requested that the rejection under Section 103(a) based on the teaching of ***Andries et al.*** and the dis-

4) Cf. eg. Tables 1 and 2 on pages 14 and 15 of the application.

5) Cf. col. 5, indicated lines 22 to 37, of *US 4,801,460*.

6) Cf. col. 5, indicated lines 49 to 57, of *US 4,801,460*.

7) Cf. col. 5, indicated lines 36 to 45, of *US 5,876,760*.

closures of *Goertz et al.*, of *Nakamichi et al.*, of *Sasatani et al.*, and of *Takada* be withdrawn. Favorable action is respectfully solicited.

REQUEST FOR EXTENSION OF TIME:

It is respectfully requested that a *one* month extension of time be granted in this case. The respective *$120.00* fee is paid by credit card (Form PTO-2038 enclosed).

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 14.1437. Please credit any excess fees to such deposit account.

Respectfully submitted,
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Encl.: CLAIM AMENDMENTS (Appendix I)

JDV/BAS